

United States Patent and Trademark Office

W

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.). FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/699,079	79 10/31/2003		Ziyun Wang	ATMI-594-CIP	1841	
25559	7590	10/04/2006		EXAM	EXAMINER	
ATMI, INC		70	BARTS, SAMUEL A			
7 COMMERCE DRIVE DANBURY, CT 06810				ART UNIT	PAPER NUMBER	
				1621		
				DATE MAILED: 10/04/200	5	

•

Please find below and/or attached an Office communication concerning this application or proceeding.

		A		44.						
Office Action Summary			Application No. Applicant(s)							
			79	WANG ET AL.						
			г	Art Unit						
		Samuel A		1621						
Period fo	The MAILING DATE of this communication or Reply	appears on th	e cover sheet with the c	orrespondence a	ddress					
WHIC - External after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING asions of time may be available under the provisions of 37 CF SIX (6) MONTHS from the mailing date of this communication period for reply is specified above, the maximum statutory pere to reply within the set or extended period for reply will, by streply received by the Office later than three months after the need patent term adjustment. See 37 CFR 1.704(b).	G DATE OF TO R 1.136(a). In no evolu- criod will apply and well tatute, cause the app	HIS COMMUNICATION rent, however, may a reply be timustiful expire SIX (6) MONTHS from blication to become ABANDONEI	N. hely filed the mailing date of this 0 (35 U.S.C. § 133).						
Status										
1)⊠	Responsive to communication(s) filed on 8	2/31/06								
2a)□		<u>757700</u> . This action is 1	non-final							
3)□	· ·			secution as to th	e merits is					
٠,١	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.									
Dienositi	ion of Claims	or Exporto Q	July 10, 1000 C.D. 11, 40	0.0.210.						
·		··								
-	Claim(s) <u>1-31</u> is/are pending in the application.									
	4a) Of the above claim(s) 14-20 and 24-31 is/are withdrawn from consideration.									
-	Claim(s) is/are allowed.									
	Claim(s) 1-12 and 21-23 is/are rejected.									
· —	Claim(s) <u>13</u> is/are objected to.									
8)∐	Claim(s) are subject to restriction ar	id/or election i	requirement.							
Applicati	on Papers		•							
9)[The specification is objected to by the Exan	niner.								
10)	10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.									
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11)	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority u	ınder 35 U.S.C. § 119									
	Acknowledgment is made of a claim for fore ☐ All b)☐ Some * c)☐ None of:			-(d) or (f).						
	1. Certified copies of the priority documents have been received.									
	2. Certified copies of the priority docum									
	3. Copies of the certified copies of the	-		ed in this Nationa	l Stage					
	application from the International Bu	•								
* See the attached detailed Office action for a list of the certified copies not received.										
		•								
Attachmen	t(s)									
1) 🛛 Notic	e of References Cited (PTO-892)		4) Interview Summary	(PTO-413)						
2) 🔲 Notic	e of Draftsperson's Patent Drawing Review (PTO-948)		Paper No(s)/Mail Da	ite						
	nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date		5) Notice of Informal P 6) Other:	atent Application						

Art Unit: 1621

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-13 and 18-23 and the elected species of (HNBu^t)₂(NH₂)Si-Si(NH₂)(HNBu^t) in the reply filed on 8/31/06 is acknowledged. The traversal is on the ground(s) that searching multiples species would not be a serious burden to the examiner. This is not found persuasive because prior art anticipating and/or rendering obvious one species would not necessarily be pertinent to other species. The additional search required to examine multiple species would be a serious burden to the examiner.

Applicant has further requested rejoinder of non-elected subject if and when claims drawn to compounds and composition are found allowable. The examiner will rejoin the process claims, as long as the scope of process claims is the same as the allowed compound claims.

The requirement is still deemed proper and is therefore made FINAL.

Status of Claims

Claims 14-17 and 24-31 are withdrawn from consideration
 Claims 18-20 are withdrawn from consideration as not being directed to the elected species.

Allowable Subject Matter

3. Claim 13 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1621

4. The following is a statement of reasons for the indication of allowable subject matter:

The elected species and the other species of claim 13 were searched and found to be novel and unobvious over the prior art of record.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yang et al¹.

Yang et al disclose the following compound²:

$$(Me)_2 N (Me)_2 \\ | \\ | \\ | \\ | \\ | \\ N(Me)_2 N (Me)_2$$

$$| \\ | \\ | \\ N(Me)_2 N (Me)_2$$

This compound meets all the limitations of the claims. Some limitations are drawn to inherent properties. For example claims 5, 6 11, and 12 are drawn to properties of the compounds. These limitations are inherent properties of the compound taught in Yang et al.

¹ Organometallics 2000, 19 893-900, "Dislane-Catalyzed and Thermally Induces Oligomerization of Alkynes: A Comparison".

² See column 2 on page 898 lines 34-38.

Art Unit: 1621

7. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kito³.

Kito discloses the following compound⁴:

This compound meets all the limitations of the claims for the same reasons given above

Claim Rejections - 35 USC § 103/102

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 21-23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kito (Chem. Abstract 1996:212092 and JP 08022986).

Kito teaches a compound which anticipates part "a" of the composition claim. The second part of the composition claim is part "b" which is drawn to the use of hydrocarbon solvents. The abstract is silent as to the use of these solvents. The patent may or may not disclose hydrocarbon solvents. If the patent discloses the use of hydrocarbon solvents the claims are

³ Chem. Abstract 1996;212092 and JP 08022986.

⁴ See abstract: A translation of the Japanese patent has be requested by the examiner.

Art Unit: 1621

anticipated. If the patent doesn't disclose hydrocarbon solvents the claim are obvious because the utility of the compound in Kito is the same as the instant invention. Thus it is reasonable to assume that a skilled artisan would use the same class of solvents to make silicon films.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel A. Barts whose telephone number is 571-272-2870. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Samuel A Barts Primary Examiner

Art Unit 1621